Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending December 15, 2018

Prepared by the Division of Infectious Disease Surveillance
Prevention and Health Promotion Administration
Maryland Department of Health

The data presented in this document are provisional and subject to change as additional reports are received.

SUMMARY

During the week ending December 15, 2018 influenza-like illness (ILI) intensity in Maryland was **MINIMAL** and there was **LOCAL** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers and outpatient visits for ILI reported by Maryland Emergency Departments increased from last week. The proportion of MRITS respondents reporting ILI increased. Clinical laboratories reported an increase in the proportion of specimens testing positive for influenza. Fifteen specimens tested positive for influenza at the MDH lab. There were 18 influenza-associated hospitalizations. There were no respiratory outbreaks reported to MDH.

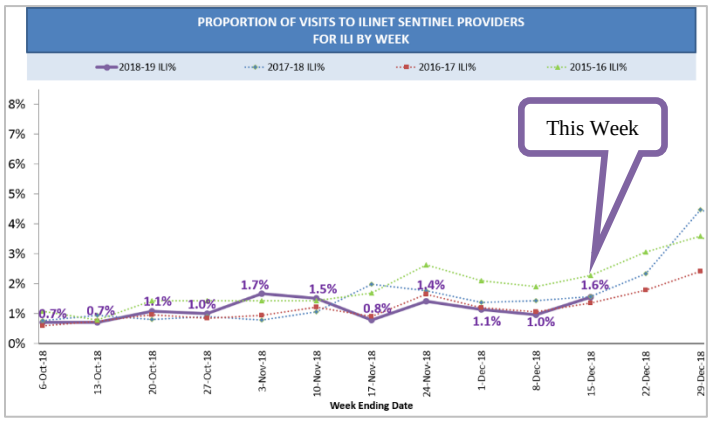
Click here to visit our influenza surveillance web page

ILI Intensity Levels
✓ Minimal
Low
Moderate
High

Influenza Geographic Activity
No Activity
Sporadic
✔ Local
Regional
Widespread

ILINet Sentinel Providers

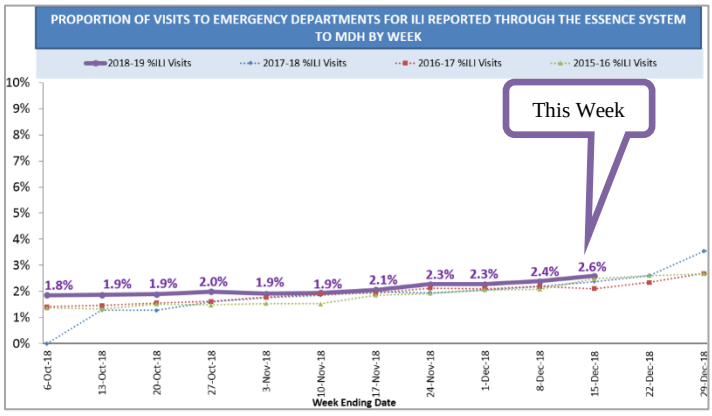
Twenty two providers reported a total of 6,786 visits this week. Of those, 106 (1.6%) were visits for ILI. This is **below** the Maryland baseline of **2.0%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	45 (42%)	25 (36%)	269 (30%)
Age 5-24	35 (33%)	23 (33%)	354 (40%)
Age 25-49	14 (13%)	8 (11%)	139 (16%)
Age 50-64	6 (6%)	14 (20%)	79 (9%)
Age ≥ 65	6 (6%)	0 (0%)	51 (6%)
Total	106 (100%)	70 (100%)	892 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 53,916 visits this week through the ESSENCE surveillance system. Of those, 1,396 (2.6%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	351 (25%)	335 (26%)	3,115 (24%)
Age 5-24	433 (31%)	401 (31%)	4,201 (33%)
Age 25-49	385 (28%)	332 (25%)	3,446 (27%)
Age 50-64	146 (10%)	143 (11%)	1,302 (10%)
Age ≥ 65	81 (6%)	102 (8%)	771 (6%)
Total	1,396 (100%)	1,313 (100%)	12,835 (100%)

Neighboring states' influenza information:

Delaware	http://dhss.delaware.gov/dph/epi/influenzahome.html
District of Columbia	http://doh.dc.gov/service/influenza
Pennsylvania	http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza.aspx#.V-LtaPkrJD8
Virginia	http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/
West Virginia	http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx

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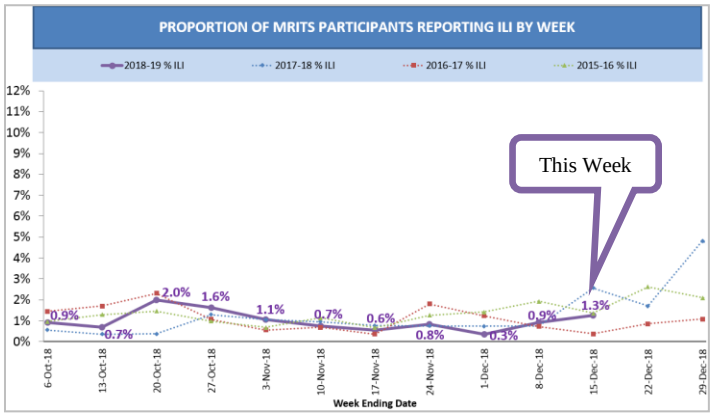
Community-based Influenza Surveillance (MRITS)

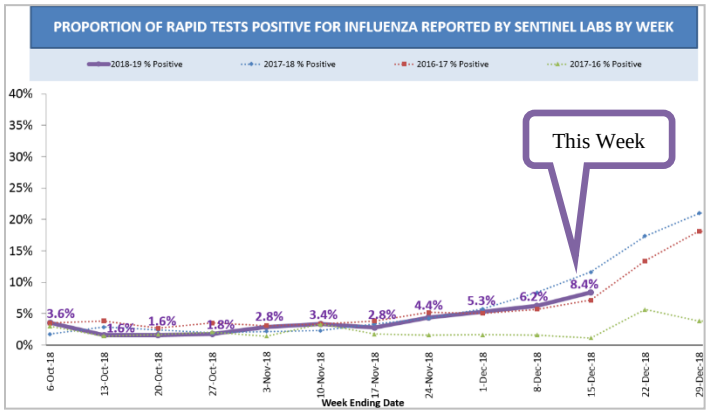
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 556 residents responded to the MRITS survey this week. Of those, 7 (1.3%) reported having ILI and missing greater than 14 cumulative day of regular daily activities.



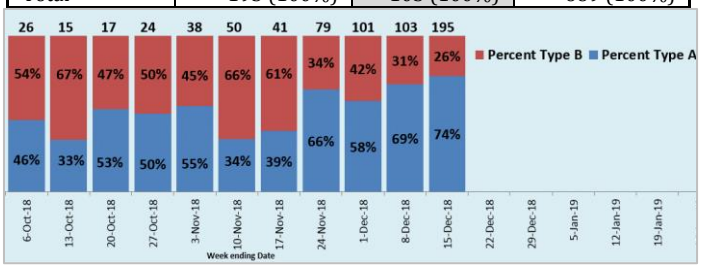
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	1 (14%)	1 (20%)	7 (12%)
Age 5-24	2 (29%)	1 (20%)	14 (23%)
Age 25-49	2 (29%)	3 (60%)	17 (28%)
Age 50-64	0 (0%)	0 (0%)	12 (20%)
Age ≥ 65	2 (29%)	0 (0%)	10 (17%)
Total	7 (100%)	5 (100%)	60 (100%)

Clinical Laboratory Influenza Testing

There were 52 clinical laboratories reporting 2,330 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 195 (8.4%) were positive for influenza. Of those testing positive, 145 (74%) were influenza Type A and 50 (26%) were influenza Type B. The reliability of RIDTs depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

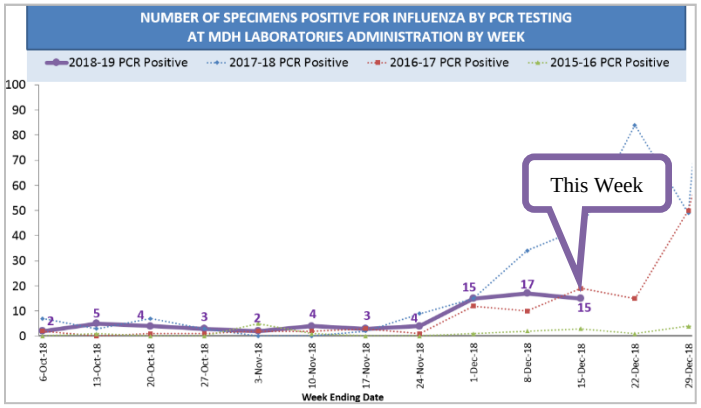


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	145 (74%)	71 (69%)	419 (61%)
Type B	50 (26%)	32 (31%)	270 (39%)
Total	195 (100%)	103 (100%)	689 (100%)



State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 116 PCR tests for influenza and 15 (12.9%) were positive for influenza. Of those testing positive, 14 (93%) were positive for Type A (H1) and 1 (7%) was positive for Type A (H3). PCR testing is more reliable than RIDT. The MDH testing identifies subtypes of influenza A and lineages of influenza B, information that is not available from the RIDT results. The table below summarizes results by type, subtype, and lineage.



Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	14 (93%)	11 (65%)	47 (64%)
Type A (H3)	1 (7%)	4 (24%)	12 (16%)
Type B (Victoria)	0 (0%)	1 (6%)	12 (16%)
Type B (Yamagata)	0 (0%)	1 (6%)	3 (4%)
Dual Type A (H1/H3)	0 (0%)	0 (0%)	0 (0%)
Total	15 (100%)	17 (100%)	74 (100%)

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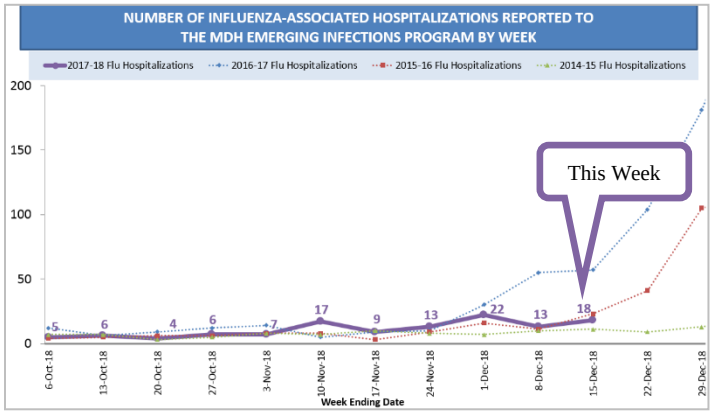
Influenza-associated Hospitalizations

A total of 18 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.) This surveillance is conducted as a component of the Maryland Emerging Infections Program.

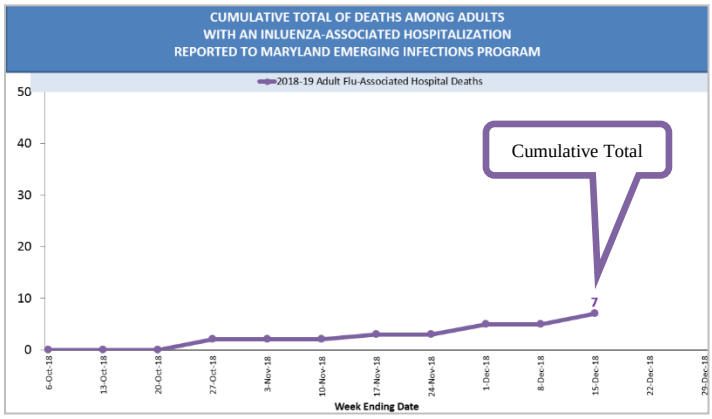


Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	1 (6%)	2 (15%)	22 (18%)
Age 5-17	2 (11%)	1 (8%)	7 (6%)
Age 18-24	1 (6%)	0 (0%)	5 (4%)
Age 25-49	3 (17%)	1 (8%)	24 (20%)
Age 50-64	5 (28%)	1(8%)	20 (17%)
Age ≥ 65	6 (33%)	8 (62%)	43 (36%)
Total	18 (100%)	13 (100%)	121 (100%)

Influenza-associated Deaths

An influenza-associated death is one with a clinically compatible illness and a positive influenza test of any kind.

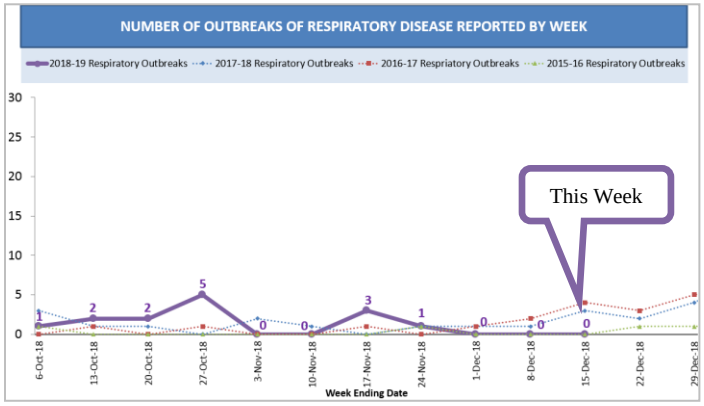
Pediatric Deaths: No pediatric (< 18 years of age) deaths were reported this week.
Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization.
Adult Deaths Among Hospitalized Patients: A cumulative season total of 7 deaths have been reported among adults admitted to Maryland hospitals.
Influenza-associated adult mortality is ***not*** a reportable condition in Maryland. However, surveillance for mortality in hospitalized adults is conducted as a component of the Maryland Emerging Infections Program.



Influenza-Associated Deaths	Cumulative Season Total
Pediatric Deaths (Age < 18)	0
Adult Deaths (in hospitalized cases)	7

Outbreaks of Respiratory Disease

There were no respiratory outbreaks reported to MDH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g., from ILI to influenza.)



Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	0 (0%)	0 (0%)	0 (0%)
Influenza-like Illness	0 (0%)	0 (0%)	5 (36%)
Pneumonia	0 (0%)	0 (0%)	9 (64%)
Other Respiratory	0 (0%)	0 (0%)	0 (0%)
Total	0 (0%)	0 (0%)	14 (100%)

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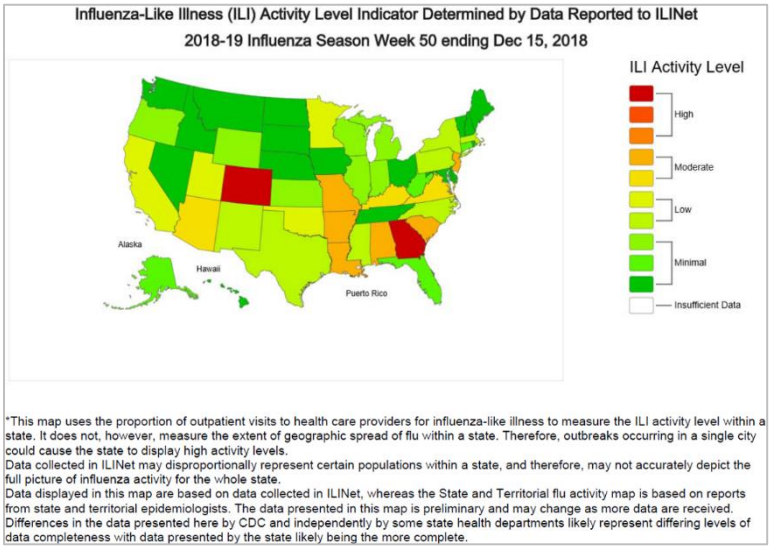
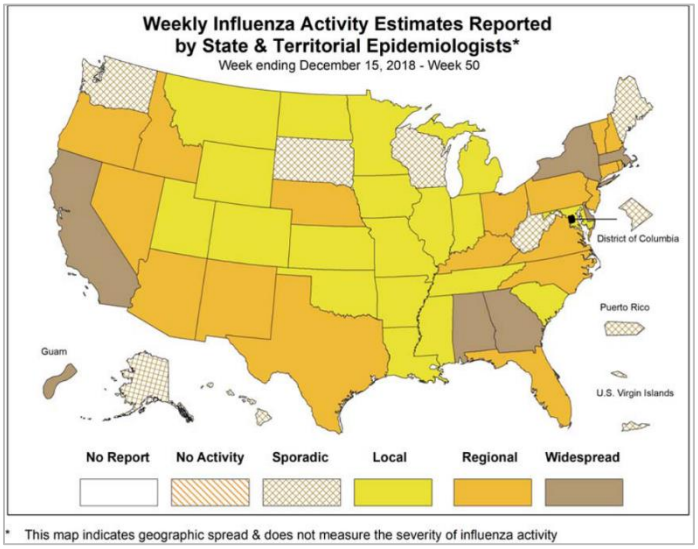
National Influenza Surveillance (CDC)

- Influenza activity in the United States is increasing. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate.
- **Viral Surveillance:** Influenza A viruses have predominated in the United States since the beginning of October. Influenza A(H1N1)pdm09 viruses are predominating in most areas of the country. However, in the most recent three weeks, influenza A(H3) viruses were most commonly reported in the southeastern United States (HHS Region 4). The percentage of respiratory specimens testing positive for influenza in clinical laboratories is increasing.
- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) increased to 2.7%, which is above the national baseline of 2.2%. Eight of 10 regions reported ILI at or above their region-specific baseline level.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam and six states was reported as widespread; 18 states reported regional activity; 19 states reported local activity; and the District of Columbia, Puerto Rico, the U.S. Virgin Islands and seven states reported sporadic activity.
- **Influenza-associated Hospitalizations:** A cumulative rate of 2.9 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among children younger than 5 years (7.7 hospitalizations per 100,000 population).
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** One influenza-associated pediatric death was reported to CDC during week 50.
- **Outpatient Illness Surveillance:** Nationwide during week 50, 2.7% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is above the national baseline of 2.2%. *(ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat.)*





Where to get an influenza vaccination

Interested in getting a flu vaccine for the 2018-19 influenza season? Go to https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.